CONTROL DATA CORPORATION

CONTROL DATA® 9736/9737 DISK STORAGE UNITS

DESIGNED FOR ORIGINAL EQUIPMENT MANUFACTURERS

The CONTROL DATA 9736 and 9737 Disk Storage Units are large-capacity, random-access storage devices which record and read information in IBM-compatible recording modes. The recording format is fully compatible with the IBM 2314 Direct Access Storage Facility, permitting full pack interchangeability between the 9736/9737 and any machine using the same recording format.

The basic disk storage unit consists of a cabinet which contains a spindle and associated drive motor, head-positioning mechanism, power supply, and logic chassis. The 9736/9737 models use the CDC® 869 Disk Pack or equivalent (IBM 2316). The disk pack contains eleven disks and stores information on twenty oxide-coated surfaces.

Head positioning is performed by a closed loop, proportional servosystem. The carriage is driven by a voice coil linear actuator, allowing rapid accessing.

These storage units are available in single-channel (9736) or dual-channel (9737) models. Both models have an optional seek-overlap feature which enables seek operations to be performed on all spindles which are not being used for read/write operations. The dual-channel, 9737, allows read/write operations to occur on two units simultaneously (when two interface units are used), while seek operations are performed on other spindles.

9736/9737 OEM DISK STORAGE UNIT SPECIFICATIONS

RECORDING FORMAT/CAPACITY

Capacity, full track mode spindle:
62,500 bits/track (nominal)
1.25 x 10^6 bits/cylinder
250 x 10^6 bits/cylinder (based on 200 tracks)
Recording Mode: Double frequency
Recording Density: 1530 bpi (outer track)
2220 bpi (inner track)
Tracks Per Surface: 200 (plus 3 spares)

PROCESSING SPEED

Data Transfer Rate: 312,000 bytes/second
Bit Rate: 2.50 MHz (nominal)
Spindle Speed: 2400 rpm

ACCESSING TIME (Direct Seek on Track)

Full Stroke: 70 milliseconds
Average: 35 milliseconds
One Track: 7 milliseconds

DISK PACK

Type: CDC 869 or equivalent (IBM 2316)
Number of Disks: 11
Usable Surfaces: 20
Diameter: 14 inches
Coating: Magnetic oxide

RECORDING HEADS PER SPINDLE

Type: Saddle erase (compatible with IBM 2314)
Total Number: 20
Read/Write Width: 0.007-inch, nominal
Read/Write to Erase Gap: 0.003-inch, nominal
Erase Width: 0.012-inch, nominal
Track Spacing: 0.010-inch, nominal

OPERATOR CONTROL

Switch/Indicators: Start (stop)
Logic Number (interchangeable plug)
Fault
Indicator Only: Unit Number
Maintenance

INTERFACE

Transmission Level/s: Logical "0"=zero volts differential
Logical "1"=1.4 volts differential
Rise and Fall Time: 25 nanoseconds (nominal)
Transmission Line: Balanced, twisted pair, terminated in 56 ohms to ground

POWER

Power Source: Two legs of 208 VAC, 3 phase, 60 Hz
Current/Phase: 7.0 amps (disks in motion)
3.0 amps (disks at rest)

PHYSICAL

Height: 38 inches
Width: 27½ inches
Depth: 37½ inches
Weight: 500 pounds

Environment (operating) —
Temperature: 60 to 90°F
Humidity: 10 to 80 percent R.H. (noncondensing)

Environment (nonoperating) —
Temperature: minus 30 to plus 150°F
Humidity: 5 to 95 percent R.H. (noncondensing)
Heat Dissipation: 2900 BTU/Hr.

Specifications are subject to change without notice.

CONTROL DATA SALES OFFICES ARE LOCATED IN PRINCIPAL CITIES THROUGHOUT THE WORLD.

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